

Amendments to the Claims:

This listing of the claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (Currently Amended): Method of assembling a cap (20) of a closure device (9) with an open end (6, 7) of a housing container (5) to form a container system (1) for body fluids, tissue parts or tissue cultures, whereby a relative rotating or pivoting movement is effected about a common longitudinal axis (14) between the cap (20) and the housing container (5), ~~characterised in that~~ wherein an axially directed pressing force(F) is applied to at least one of the components (5, 20) to be assembled more or less in the direction of the longitudinal axis (14) in order to generate the relative movement.

Claim 2 (Currently Amended): Method as claimed in claim 1, ~~characterised in that~~ wherein the pressing force (F) is applied to the cap (20) of the closure device (9).

Claim 3 (Currently Amended): Method as claimed in ~~claim 1 or 2, characterised in that,~~ claim 1, wherein when the pressing force (F) is being applied, the cap (20) is held stationary relative to the housing container (5) and the housing container (5) is displaced in the relative rotating or pivoting movement.

Claim 4 (Currently Amended): Method as claimed in ~~claim 1 or 2, characterised in that~~ claim 1, wherein the housing container (5) is held stationary relative to the cap (20) when the pressing force (F) is being applied.

Claim 5 (Currently Amended): Method as claimed in ~~one of the preceding claims, characterised in that~~ claim 1, wherein the relative rotating or pivoting movement is caused by the pressing force (F) with an intensity of between 10N and 50N.

Claim 6 (Currently Amended): Method as claimed in ~~one of the preceding claims, characterised in that,~~ claim 1, wherein before screwing on the cap (20), a sealing device (21) is inserted in it.

Claim 7 (Currently Amended): Method as claimed in ~~one of the~~

~~preceding claims, characterised in that~~ claim 1, wherein the relative rotating or pivoting movement about the common longitudinal axis (14) is caused by at least certain regions of threads (42, 43) of a thread arrangement (40) co-operating with one another.

Claim 8 (Currently Amended): Method as claimed in ~~one of the preceding claims, characterised in that,~~ claim 1, wherein before applying the pressing force (F), one of the components (5, 20) to be assembled is pre-positioned relative to the other one of the components (20, 5) to be assembled by a free rotation about the common longitudinal axis (14).

Claim 9 (Currently Amended): Method as claimed in ~~one of the preceding claims, characterised in that,~~ claim 1, wherein during the relative rotating or pivoting movement about the common longitudinal axis (14), the threads (42, 43) of the thread arrangement (40) engage with one another across the entire length of the screwing-in path until the fully screwed-in position is reached.

Claim 10 (Currently Amended): Method as claimed in ~~one of~~

~~the preceding claims, characterised in that, claim 1, wherein~~
before the assembly process on at least one component (9, 5)
forming the container system (1), a coating is applied.

Claim 11 (Currently Amended): Method as claimed in claim 10,
~~characterised in that~~ wherein the coating is applied to at least
certain areas in the region of a coupling mechanism (37) between
the cap (20) and the housing container (5).

Claim 12 (Currently Amended): Method as claimed in ~~claim 10~~
~~or 11, characterised in that~~ claim 10, wherein the coating is
applied to the part of the thread arrangement (40) disposed on
the housing container (5).

Claim 13 (Currently Amended): Method as claimed in ~~one of~~
~~claims 10 to 12, characterised in that~~ claim 10, wherein the
coating is applied to the part of the thread arrangement (40)
disposed on the cap (20).

Claim 14 (Currently Amended): Method as claimed in ~~one of~~
~~claims 10 to 13, characterised in that~~ claim 10, wherein the
coating is applied to a sealing surface (33) of a stopper (48) of

the sealing device (21) directed towards the housing container (5).

Claim 15 (Currently Amended): Method as claimed in ~~one of~~
~~claims 10 to 14~~, characterised in that claim 10, wherein the
coating is applied to an internal surface (18) of the housing
container (5) facing the sealing surface (33) of the stopper (48)
of the sealing device (21).

Claim 16 (Currently Amended): Method as claimed in ~~one of~~
~~claims 10 to 15~~, characterised in that claim 10, wherein the
coating is applied to the respective coating region continuously
or all over.

Claim 17 (Currently Amended): Method as claimed in ~~one of~~
~~claims 10 to 16~~, characterised in that claim 10, wherein the
coating reduces friction between the components to be assembled
in readiness for the joining operation.

Claim 18 (Currently Amended): Method as claimed in ~~one of~~
~~the preceding claims~~, characterised in that claim 1, wherein
several caps (20) of the closure device (9) are assembled with

the housing containers (5) simultaneously to form the container system (1) in a common assembly unit.

Claim 19 (Currently Amended): Cap (20) for forming a closure device (9) for a housing container (5) of a container system (1) for body fluids, tissue parts or tissue cultures, which cap (20) comprises a cap casing (23), two end regions (38, 39) spaced apart from one another in the direction of a longitudinal axis (14) and at least a first part of a thread arrangement (40) extending on an internal surface (41) of the cap casing (23), ~~characterised in that~~ wherein a pitch angle (50) of at least one thread (43) of the thread arrangement (40) is selected from a range with a lower limit of 2° and an upper limit of 30° by reference to a plane (49) oriented perpendicular to the longitudinal axis (14).

Claim 20 (Currently Amended): Cap (20) as claimed in claim 19, ~~characterised in that~~ wherein the pitch angle (50) is selected from a range with a lower limit of 3°, in particular 5°, preferably of 8°, 10°, 13°, 15° and an upper limit of 25°, in particular 20°, preferably of 16°, 13°, 12°.

Claim 21 (Currently Amended): Cap (20) as claimed in ~~claim 19 or 20~~, characterised in that claim 19, wherein the pitch angle (50) is 9° or 10° or 11° or 12°.

Claim 22 (Currently Amended): Cap (20) as claimed in ~~one of claims 19 to 21~~, characterised in that claim 19, wherein the at least one thread (43) is formed by several first thread segments (99) in its longitudinal extension disposed one after the other and spaced at a distance apart as viewed in the circumferential direction.

Claim 23 (Currently Amended): Cap (20) as claimed in ~~one of claims 19 to 22~~, characterised in that claim 10, wherein the thread arrangement (40) is made up of several threads.

Claim 24 (Currently Amended): Cap (20) as claimed in claim 23, ~~characterised in that~~ wherein the thread arrangement (40) comprises three threads (43) distributed around the internal surface (41).

Claim 25 (Currently Amended): Cap (20) as claimed in ~~claim 23 or 24~~, characterised in that claim 23, wherein thread

beginnings (51 to 53) of the individual threads (43) are offset from one another in the circumferential direction by approximately 120°.

Claim 26 (Currently Amended): Cap (20) as claimed in ~~one of~~ ~~claims 19 to 25, characterised in that~~ claim 19, wherein a respective thread length of the individual threads (43) making up the thread arrangement (40) are the same as or smaller in the plane (49) oriented perpendicular to the longitudinal axis (14) as viewed around the circumference than an internal circumference of the cap casing (23) in the region of the thread arrangement (40).

Claim 27 (Currently Amended): Cap (20) as claimed in ~~one of~~ ~~claims 19 to 26, characterised in that~~ claim 19, wherein a thread (43) extends more or less across half the internal circumference of the cap casing (23).

Claim 28 (Currently Amended): Cap (20) as claimed in ~~one of~~ ~~claims 19 to 27, characterised in that~~ claim 19, wherein the at least one thread (43) projects out from the internal surface (41) of the cap casing (23) in the direction towards the longitudinal axis (14).

Claim 29 (Currently Amended): Cap (20) as claimed in ~~one of~~
~~claims 19 to 28, characterised in that~~ claim 19, wherein the
internal surface (41) of the cap casing (23) is provided with a
coating at least in the region of the thread (43).

Claim 30 (Currently Amended): Cap (20) as claimed in ~~one of~~
~~claims 19 to 29, characterised in that~~ claim 19, wherein at least
certain regions of the thread arrangement (40), in particular the
thread or threads (43), are provided with the coating.

Claim 31 (Currently Amended): Cap (20) as claimed in ~~claim~~
~~29 or 30, characterised in that~~ claim 29, wherein the coating is
formulated with a view to reducing friction and contains at least
one lubricant or a lubricant additive.

Claim 32 (Currently Amended): Cap (20) as claimed in ~~one of~~
~~claims 29 to 31, characterised in that~~ claim 29, wherein the
coating and/or a lubricant is supplied from at least one recess
(101) in the region of the thread (43).

Claim 33 (Currently Amended): Cap (20) as claimed in ~~one of~~
~~claims 19 to 32, characterised in that~~ claim 19, wherein the

lubricant or lubricant additive is already added to or incorporated in the material used to make it.

Claim 34 (Currently Amended): Cap (20) as claimed in ~~one of~~ ~~claims 19 to 33~~, characterised in that claim 19, wherein the at least one thread (43) has a surface roughness of between 0.0125 µm and 0.05 µm on at least one portion co-operating with the thread (42) of the housing container (5).

Claim 35 (Currently Amended): Cap (20) as claimed in ~~one of~~ ~~claims 19 to 34~~, characterised in that claim 19, wherein a sealing device (21) can be retained in it by means of a coupling mechanism (28).

Claim 36 (Currently Amended): Cap (20) as claimed in claim 35, ~~characterised in that~~ wherein the coupling mechanism (28) is provided in the form of projections (29, 30) spaced at a distance apart from one another in the direction of the longitudinal axis (14) and disposed on at least certain regions around the internal circumference, projecting out from the cap casing (23) in the direction towards the longitudinal axis (14), which form a groove-shaped accommodating region on the internal face of the cap casing (23).

Claim 37 (Currently Amended): Cap (20) as claimed in ~~claim 35 or 36, characterised in that~~ claim 35, wherein at least one passage (102) is disposed in the portion of the groove-shaped accommodating region in the cap casing (23), in at least certain regions of which the insertable sealing device (21), in particular its shoulder (32), engages.

Claim 38 (Currently Amended): Cap (20) as claimed in claim 37, ~~characterised in that~~ wherein several passages (102) are distributed around the circumference.

Claim 39 (Currently Amended): Cap (20) as claimed in ~~one of claims 19 to 38, characterised in that~~ claim 19, wherein an internal clearance width (118) of the projection (30) which can be placed facing an open end (6) of a housing container (5) approximately corresponds to an external dimension (119) of the housing container (5) in the region of its open end (6).

Claim 40 (Currently Amended): Housing container (5) for forming a container system (1) for body fluids, tissue parts or tissue cultures which can be closed off by means of a closure device (9), which housing container (5) has two ends (6, 7)

spaced apart from one another in the direction of a longitudinal axis (14) and bounding an interior (10), and at least one of the two ends (6, 7) has an open end face (19) which can be closed by the closure device (9) which can be opened again, and at least a second part of a thread arrangement (40) is provided on an external surface (18) of the housing container (5), ~~characterised in that~~ wherein a pitch angle (60) of at least one thread (42) of the thread arrangement (40) is selected from a range with a lower limit of 2° and an upper limit of 30° by reference to a plane (49) oriented perpendicular to the longitudinal axis (14).

Claim 41 (Currently Amended): Housing container (5) as claimed in claim 40, ~~characterised in that~~ wherein the pitch angle (60) is selected from a range with a lower limit of 3°, in particular 5°, preferably of 8°, 10°, 13°, 15°, and an upper limit of 25°, in particular 20°, preferably of 16°, 13°, 12°.

Claim 42 (Currently Amended): Housing container (5) as claimed in ~~claim 40 or 41,~~ claim 40, wherein the pitch angle (60) is 9° or 10° or 11° or 12°.

Claim 43 (Currently Amended): Housing container (5) as claimed in ~~one of claims 40 to 42,~~ claim

40, wherein the at least one thread (42) is made up of several other thread segments (100) disposed one after the other and spaced at a distance apart from one another along its longitudinal extension as viewed in the circumferential direction.

Claim 44 (Currently Amended): Housing container (5) as claimed in ~~one of claims 40 to 43, characterised in that~~ claim 40, wherein the thread arrangement (40) is made up of several threads.

Claim 45 (Currently Amended): Housing container (5) as claimed in claim 44, ~~characterised in that~~ wherein the thread arrangement (40) comprises three threads (42) distributed around the external surface (18).

Claim 46 (Currently Amended): Housing container (5) as claimed in ~~claim 44 or 45, characterised in that~~ claim 44, wherein thread beginnings (54 to 56) of the individual threads (42) are offset from one another in the circumferential direction by approximately 120°.

Claim 47 (Currently Amended): Housing container (5) as

~~claimed in one of claims 40 to 46, characterised in that~~ claim 40, wherein the sum of the thread lengths of the threads (42) making up the thread arrangement (40) in the plane (49) oriented perpendicular to the longitudinal axis (14) as viewed around the circumference is the same as or smaller than an external circumference of the housing container (5) in the region of the thread arrangement (40).

Claim 48 (Currently Amended): Housing container (5) as ~~claimed in one of claims 40 to 47, characterised in that~~ claim 40, wherein the thread (42) extends with its full thread height (62) between its thread beginning (54 to 56) and its thread end (57 to 59) across an angle (61) of between 50° and 80° as viewed around the circumference.

Claim 49 (Currently Amended): Housing container (5) as claimed in claim 48, ~~characterised in that~~ wherein the angle (61) is approximately 65°.

Claim 50 (Currently Amended): Housing container (5) as ~~claimed in one of claims 40 to 49, characterised in that~~ claim 40, wherein the thread (42) has a thread outlet (63) in the portion of its thread beginning (54 to 56), starting from its

full thread height (62), which constantly decreases in height towards the external surface (18).

Claim 51 (Currently Amended): Housing container (5) as claimed in ~~one of claims 40 to 50~~, characterised in that claim 40, wherein the thread (42) has another thread outlet (64) in the portion of its thread end (57 to 59), starting from its full thread height (62), which constantly decreases in height towards the external surface (18).

Claim 52 (Currently Amended): Housing container (5) as claimed in ~~claim 50 or 51~~, characterised in that claim 50, wherein the thread outlet (63, 64) is formed by a transition radius (65).

Claim 53 (Currently Amended): Housing container (5) as claimed in ~~one of claims 40 to 52~~, characterised in that claim 40, wherein the respective threads (42) directly adjacent to one another in the circumferential direction are spaced at a distance apart from one another.

Claim 54 (Currently Amended): Housing container (5) as claimed in ~~one of claims 40 to 53~~, characterised in that claim

40, wherein a thread cross-section of the thread (42) is non-symmetrical in a plane oriented parallel with and extending through the longitudinal axis (14).

Claim 55 (Currently Amended): Housing container (5) as claimed in ~~one of claims 40 to 54, characterised in that~~ claim 40, wherein the thread cross-section has an apex surface (72) in the portion of the full thread height (62) of the thread (42) oriented parallel with the longitudinal axis (14).

Claim 56 (Currently Amended): Housing container (5) as claimed in ~~one of claims 53 to 55, characterised in that~~ claim 53, wherein the thread cross-section on the side directed towards the open end face (19) of the housing container (5) is bounded by a first radius (67) starting from the apex surface (72) towards the external surface (18).

Claim 57 (Currently Amended): Housing container (5) as claimed in ~~one of claims 53 to 56, characterised in that~~ claim 53, wherein the thread cross-section on the side remote from the open end face (19) of the housing container (5) is bounded by a straight transition surface (69) extending at an angle in the direction towards the open end face (19).

Claim 58 (Currently Amended): Housing container (5) as claimed in claim 57, ~~characterised in that~~ wherein the thread cross-section is bounded between the apex surface (72) oriented parallel with the longitudinal axis (14) and the transition surface (69) with another radius (71).

Claim 59 (Currently Amended): Housing container (5) as claimed in ~~one of claims 56 to 58, characterised in that~~ claim 56, wherein the first radius (67) is bigger than the other radius (71).

Claim 60 (Currently Amended): Housing container (5) as claimed in ~~one of claims 40 to 59, characterised in that~~ claim 40, wherein the thread beginnings (54 to 56) extend into the region of the external surface (18) close to its open end face (19).

Claim 61 (Currently Amended): Housing container (5) as claimed in ~~one of claims 40 to 60, characterised in that~~ claim 40, wherein its external surface (18) is provided with a coating at least in the region of the thread (42).

Claim 62 (Currently Amended): Housing container (5) as claimed in ~~one of claims 40 to 61, characterised in that~~ claim 40, wherein at least certain regions of the thread arrangement (40), in particular the thread or threads (42), are provided with the coating.

Claim 63 (Currently Amended): Housing container (5) as claimed in ~~one of claims 40 to 62, characterised in that~~ claim 40, wherein it is provided with the coating at least in the region of an internal surface (18) which can be directed towards a sealing surface 33 of a sealing device 21.

Claim 64 (Currently Amended): Housing container (5) as claimed in ~~one of claims 61 to 63, characterised in that~~ claim 61, wherein the coating is formulated to reduce friction and contains at least one lubricant or a lubricant additive.

Claim 65 (Currently Amended): Housing container (5) as claimed in ~~one of claims 40 to 64, characterised in that~~ claim 40, wherein the at least one thread (42) has a surface roughness of between 0.0125 μm and 0.05 μm at least on the portion co-operating with the other thread (43) of the cap (20).

Claim 66 (Currently Amended): Housing container (5) as claimed in ~~one of claims 40 to 65, characterised in that~~ claim 40, wherein a retaining mechanism (79) is disposed in the region of a separating device (77) which can be inserted in the interior (10) with a view to establishing its initial position.

Claim 67 (Currently Amended): Housing container (5) as claimed in claim 66, ~~characterised in that~~ wherein the retaining mechanism (79) is provided in the form of at least one shoulder (81) projecting out from the circumference of the internal surface (80) in the direction towards the longitudinal axis (14).

Claim 68 (Currently Amended): Housing container (5) as claimed in ~~claim 66 or 67, characterised in that~~ claim 66, wherein the retaining mechanism (79) is provided in the form of at web (82) projecting out from at least certain regions of the circumference of the internal surface (80) in the direction towards the longitudinal axis (14).

Claim 69 (Currently Amended): Housing container (5) as claimed in claim 68, ~~characterised in that~~ wherein the web (82) is disposed continuously around the circumference of the internal surface (80).

Claim 70 (Currently Amended): Housing container (5) as claimed in ~~one of claims 66 to 69, characterised in that~~ claim 66, wherein the retaining mechanism (79) is provided in the form of a reduction in an internal dimension (13) of the interior (10).

Claim 71 (Currently Amended): Housing container (5) as claimed in ~~one of claims 66 to 70, characterised in that~~ claim 66, wherein the retaining mechanism (79) is provided in the form of a groove-shaped recess extending round the circumference of the internal surface (80).

Claim 72 (Currently Amended): Housing container (5) as claimed in ~~one of claims 66 to 71, characterised in that~~ claim 66, wherein a positioning mechanism (83) is disposed in the region of a working position for the separating device (77) to be inserted in the interior (10).

Claim 73 (Currently Amended): Housing container (5) as claimed in claim 72, ~~characterised in that~~ wherein the positioning mechanism (83) is provided in the form of a reduction in an internal dimension (84) of the interior (10).

Claim 74 (Currently Amended): Housing container (5) as claimed in ~~claim 72 or 73, characterised in that claim 72,~~ wherein the positioning mechanism (83) is provided in the form of an abutment surface (85) oriented more or less perpendicular to the longitudinal axis (14).

Claim 75 (Currently Amended): Housing container (5) as claimed in ~~one of claims 40 to 74, characterised in that claim 40,~~ wherein a tapered region of the housing container (5) in its interior (10) or its housing compartment (117) between the two planes (15, 16) is between 0.1' and 3.0', preferably between 0.6' and 1.0'.

Claims 76-94 (Canceled).

Claim 95 (Currently Amended): Container system (1), comprising at least a cap (20), a sealing device (21) retained in it and a housing container (5), ~~characterised in that the cap (20) is as claimed in one of claims 19 to 39 and the housing container (5) is as claimed in one of claims 40 to 94~~ claim 40.

Claim 96 (Currently Amended): Container system (1) a

claimed in claim 95, ~~characterised in that~~ wherein a sealing device (21) inserted in the cap (20) is provided with a coating prior to being inserted, at least in the region of a sealing surface (33) which can be directed towards the internal surface (18) of the housing container (5).

Claim 97 (Currently Amended): Container system (1) as claimed in ~~claim 95 or 96, characterised in that~~ claim 95, wherein an interior (10) sealed off from the external atmosphere is reduced to a pressure lower than the external ambient pressure, in particular is evacuated.

Claim 98 (Currently Amended): Container system (1) as claimed in ~~one of claims 95 to 97, characterised in that~~ claim 95, wherein a retaining ring (31) is disposed between a shoulder (31) projecting radially around a stopper (48) of the sealing device (21) and a projection (29) of the cap (20) spaced at a farther distance from the housing container (5).

Claim 99 (Currently Amended): Container system (1) as claimed in ~~one of claims 95 to 98, characterised in that~~ claim 95, wherein an internal clearance width (118) of the projection (30) of the cap (20) which can be directed towards an open end

(6) of a housing container (5) more or less corresponds to an external dimension (119) of the housing container (5) in the region of its open end (6).

Claim 100 (Currently Amended): Container system (1) as claimed in ~~one of claims 95 to 99, characterised in that~~ claim 95, wherein at least one passage (117) is formed between the sealing device (21) and an open end (6) of the housing container (5) when the threads (42, 43) of a thread arrangement (40) on the housing container (5) and on the cap (20) are still engaged.

Claim 101 (Currently Amended): Container system (1) as claimed in claim 100, ~~characterised in that~~ wherein the passage (117) is formed between a stopper (48) of the sealing device (21) to be inserted in the interior (10) and the open end (6) of the housing container (5).

Claim 102 (Currently Amended): Container system (1) as claimed in ~~claim 100 or 101, characterised in that~~ claim 100, wherein an oblique surface (120) tapering in the direction towards the longitudinal axis (14) is provided on the stopper (48) of the sealing device (21) between a sealing surface (33) facing the housing container (5) and another sealing surfaces

oriented perpendicular to a longitudinal axis (14) and directed towards the interior (10).

Claim 103 (Currently Amended): Container system (1) as claimed in ~~one of claims 95 to 102, characterised in that~~ claim 95, wherein the sealing surface (33) on the stopper (48) has a dimension (121) of between 1.0 mm and 2.5 mm, preferably 1.5 mm, in the direction of the longitudinal axis (14).

Claim 104 (Currently Amended): Container system (1) as claimed in claim 100, ~~characterised in that~~ wherein the passage (117) is provided in the form of at least one groove-shaped recess (122) disposed in the region of a sealing surface (33) of the stopper (48).

Claim 105 (Currently Amended): Container system (1) as claimed in claim 104, ~~characterised in that~~ wherein the recess (122) extends from a peripheral region (123) directed towards an interior (10) of the housing container (5) in the direction toward the shoulder (32) and terminates before it at a distance (124) of between 1.0 mm and 2.5 mm, preferably 1.5 mm.

Claim 106 (Currently amended): Container system (1) as

claimed in ~~one of claims 95 to 105, characterised in that~~ claim 95, wherein at least one passage (102) is disposed in the portion of a groove-shaped accommodating region in the cap casing (23), in which at least certain regions of the inserted sealing device (21), in particular its shoulder (32), are engaged.

Claim 107 (Currently Amended): Container system (1) as claimed in ~~one of claims 95 to 106, characterised in that~~ claim 95, wherein additional catch means are provided between the shoulder (32) of the sealing device (21) and the cap (20), in particular its cap casing (23).